Commonwealth of Kentucky
Natural Resources and Environmental Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382

AIR QUALITY PERMIT

Permittee Name: Louisville Gas and Electric Company (LG&E)
Mailing Address: P.O. Box 32010, Louisville, Kentucky 40232

is authorized to operate an electric power generating plant located near Bedford, Wises Landing, Kentucky

Source Name: Trimble County Generating Station
Mailing Address: 487 Corn Creek Road, Bedford, Kentucky 40006-8514

Source Location: Highways 754 and 1838, Bedford
Permit Type: Federally-Enforceable

Review Type: Title V
Permit Number: V-97-024
Log Number: E720
Application Complete Date: December 13, 1996
KYEIS #: 104-3880-0002
AFS Plant ID #: 21-223-00002
FINDS Number: KYD991277096
SIC Code: 4911

Region: North Central
County: Trimble

Issuance Date:
Expiration Date:

John E. Hornback, Director
Division for Air Quality

DEP7001 (1-95)

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SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application which was determined to be administratively and technically complete on December 13, 1996, the Kentucky Division for Air Quality hereby authorizes the operation of the processing and air pollution equipment described herein in accordance with the terms and conditions of this permit. This draft permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any emissions units without first having submitted a complete application to the permitting authority and received a permit for the planned activity, except as provided in this permit or in Regulation 401 KAR 50:035, Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Division or any other federal, state, or local agency.

This permit contains provisions which require that specific test methods, monitoring or record keeping be used as a demonstration of compliance with permit limits. However, these provisions do not shield the source from violations of the applicable requirements being established and documented through other credible evidence, nor does it relieve the source from its obligation to comply with the underlying emission limits or other applicable requirements being monitored.

SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit: 01 (01) - Unit 1 Indirect Heat Exchanger

Description:
Construction commenced: on or before September 18, 1978
Pulverized coal-fired, dry bottom, tangentially-fired, equipped with electrostatic precipitator and wet spray scrubber with limestone/lime injection
Up to forty (40) percent petroleum coke co-firing with coal
Number two fuel oil used for startups and flame stabilization
Maximum continuous rating: 5,333 MMBTU/hour

Applicable Regulations:

Regulation 401 KAR 59:015, New indirect heat exchangers, incorporating by reference 40 CFR 60 Subpart D, Standards of Performance for fossil-fuel-fired steam generators, for an emissions unit greater than 250 MMBTU/hour and commenced after August 17, 1971; and
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

1. Operating Limitations:
None

2. Emission Limitations:

a) Pursuant to Regulation 401 KAR 59:015, Section 4(1)(b), and Regulation 401 KAR 51:017, particulate emissions shall not exceed 0.1 lb/MMBTU based on a three-hour average.

The permittee may assure continuing compliance with the particulate emission standard by operating the affected facility and associated control equipment such that the opacity does not exceed the upper limit of the indicator range developed from continuous opacity monitoring (COM) data collected during stack tests. If five (5) percent of COM data (based on a three-hour rolling average) recorded in a calendar quarter show excursions from the indicator range, the permittee shall contact the Division within thirty (30) days after the end of the quarter to schedule a stack test to demonstrate compliance with the particulate standard while operating at the conditions which resulted in the excursions. The Division may waive this testing requirement upon a demonstration that the cause of the excursions has been corrected, or may require stack tests at any time pursuant to Regulation 401 KAR 50:045, Performance tests.

b) Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except a maximum of twenty-seven (27) percent opacity for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

2. Emission Limitations continued:

c) Pursuant to Regulation 401 KAR 51:017, sulfur dioxide emissions shall not exceed 0.84 lb/MMBTU based on a three-hour average.

d) Pursuant to Regulation 401 KAR 59:015, Section 6(1)(c), nitrogen oxides emissions expressed as nitrogen dioxide shall not exceed 0.7 lb/MMBTU based on a three-hour average.

3. Testing Requirements:

a) The permittee shall conduct at least one performance test for particulate emissions within six months following the issuance of this permit. The upper limit of the indicator range shall be developed from the COM data collected during the stack tests.

b) If no additional stack tests are performed pursuant to Condition 2. a) above, the permittee shall conduct one performance test for particulate emissions within the third year of the term of this permit to demonstrate compliance with the allowable standard.

4. Specific Monitoring Requirements:

a) Pursuant to Regulation 401 KAR 59:015, Section 7(1) and Section 7(4), Regulation 401 KAR 59:005, Section 4, continuous emission monitoring systems shall be installed, calibrated, maintained, and operated for measuring the opacity of emissions, sulfur dioxide, nitrogen oxides, and either oxygen or carbon dioxide emissions. The owner or operator shall ensure the continuous emission monitoring systems are in compliance with, and the owner or operator shall comply with the requirements of Regulation 401 KAR 59:005, Section 4.

b) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for performance evaluations of the sulfur dioxide and nitrogen oxides continuous emission monitoring system as required under Regulation 401 KAR 59:005, Section 4(3) and calibration checks as required under Regulation 401 KAR 59:005, Section 4(4), reference methods 6 or 7 shall be used as applicable as described by Regulation 401 KAR 50:015.

c) Pursuant to Regulation 401 KAR 59:015, Section 7(3), sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60, filed by reference in Regulation 401 KAR 50:015.

d) Pursuant to Regulation 401 KAR 59:015, Section 7(3), the span value for the continuous emission monitoring system measuring opacity of emissions shall be eighty (80), ninety (90), or one-hundred (100) percent and the span value for the continuous emission monitoring system measuring sulfur dioxide and nitrogen oxides emissions shall be in accordance with Regulation 401 KAR 59:015, Appendix C.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Specific Monitoring Requirements continued:

e) All span values computed under (d) above for burning combinations of fuels shall be rounded to the nearest 500 ppm.

f) Continuous emission monitoring data shall be converted into the units of applicable standards using the conversion procedure described in Regulation 401 KAR 59:015, Section 7(5).

g) Pursuant to Regulation 401 KAR 59:015, Section 7(3), for an indirect heat exchanger that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Division's approval.

5. Specific Record Keeping Requirements:

a) Pursuant to Regulation 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by Regulation 401 KAR 59:005 recorded in a permanent form suitable for inspection.

b) Pursuant to Regulation 401 KAR 50:035, records, including those documenting the results of each compliance test, shall be maintained for five (5) years.

c) Pursuant to Regulation 401 KAR 59:005, Section 3(2), the owner or operator of this unit shall maintain the records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the emissions unit, any malfunction of the air pollution control equipment; or any period during which a continuous monitoring system or monitoring device is inoperative.

d) The permittee shall maintain records of the COM data on a three-hour rolling average basis, the number of excursions above the indicator range, time and date of excursions, opacity value of the excursions, and percentage of the COM data showing excursions from the indicator range in each calendar quarter.

6. Specific Reporting Requirements:

a) Pursuant to Regulation 401 KAR 59:005, Section 3 (3), minimum data requirements which follow shall be maintained and furnished in the format specified by the Division. Owners or operators of facilities required to install continuous monitoring systems shall submit for every calendar quarter a written report of excess emissions (as defined in applicable sections) to the Division. All quarterly reports shall be postmarked by the thirtieth (30th) day following the end of each calendar quarter and shall include the following information:

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Specific Reporting Requirements continued:

a) continued

1) The magnitude of the excess emission computed in accordance with the Regulation 401 KAR 59:005, Section 4(8), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.

2) All hourly averages shall be reported for sulfur dioxide and nitrogen oxides monitors. The hourly averages shall be made available in the format specified by the Division.

3) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the emissions unit. The nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

4) The date and time identifying each period during which continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.

5) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

b) Pursuant to Regulation 401 KAR 59:015, Section 7(7), for the purposes of reports required under Regulation 401 KAR 59:005, Section 3(3), periods of excess emissions that shall be reported are defined as follows:

1) Excess emissions are defined as any six minute period during which the average opacity of emissions exceeds twenty percent opacity, except that one (1) six (6) minute average per hour of up to twenty-seven (27) percent opacity need not be reported.

2) Excess emissions of sulfur dioxide are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable sulfur dioxide emissions standards.

3) Excess emissions for emissions units using a continuous monitoring system for measuring nitrogen oxides are defined as any three (3) hour period during which the average emissions (arithmetic average of three contiguous one hour periods) exceed the applicable nitrogen oxides emissions standards.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Specific Reporting Requirements continued:

c) The permittee shall report the number of excursions above the indicator range, date and time of excursions, opacity value of the excursions, and percentage of the COM data showing excursions from the indicator range in each calendar quarter.

7. Specific Control Equipment Operating Conditions:

a) The electrostatic precipitator and wet spray scrubber with limestone/lime injection shall be operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the control equipment shall be maintained.

c) See Section E for further requirements.

8. State-Origin Requirements:

a) Operating Limitations:
NA
b) Emission Limitations:
NA

9. Alternate Operating Scenarios:
NA

10. Compliance Schedule
NA

11. Compliance Certification Requirements
See Section F.

SECTION B -EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Units: 02 (02, 03, 04) - Auxiliary boilers A, B, and C

Description:
Constructed commenced on or before: December 28, 1987
#2 Fuel Oil-fired Units
Maximum continuous rating: 11.76 MMBTU/hour, each

Applicable Regulations:

Regulation 401 KAR 59:015, New indirect heat exchangers, applicable to an emissions unit less than 250 MMBTU/hour and commenced on or after April 9, 1972.

1. Operating Limitations:

a) Total annual #2 fuel oil usage rate for all auxiliary boilers A, B, and C (emission point 02) shall not exceed 682,500 gallons per year and sulfur content shall not exceed 0.8 percent, to demonstrate non-applicability of Prevention of Significant Deterioration of Air Quality.

2. Emission Limitations:

a) Pursuant to Regulation 401 KAR 59:015, Section 4(1)(b), particulate emissions shall not exceed 0.1 lb/MMBTU based on a three-hour average. Compliance with the allowable particulate standard may be demonstrated by calculating particulate emissions using fuel heating value, and emission factor information (Particulate formula: (0.002 lbs/gallon) / heating value in MMBTU/gallon.)

b) Pursuant to Regulation 401 KAR 59:015, Section 4(2), emissions shall not exceed twenty (20) percent opacity based on a six-minute average except a maximum of forty (40) percent opacity for not more than six (6) consecutive minutes in any sixty (60) consecutive minutes during cleaning the firebox or blowing soot is allowed.

c) Pursuant to Regulation 401 KAR 59:015, Section 5(1)(b), the sulfur dioxide emission rate shall not exceed 0.8 lb/MMBTU based on a three-hour average. Compliance with the allowable sulfur dioxide standard shall be demonstrated by calculating sulfur dioxide emissions using fuel heating value, fuel supplier certification with sulfur content, and emission factor information (AP-42 factors below). Sulfur dioxide formula: (0.142 lb/gallon x Percent Sulfur in fuel) / heating value in MMBTU/gallon.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

3. Testing Requirements:

Compliance with the opacity standard shall be demonstrated by reading the opacity once in every quarter by EPA Reference Method 9.

4. Specific Monitoring Requirements:

a) To demonstrate continuing compliance with the fuel oil sulfur content limitation, monitoring of operations shall consist of, on an as-received basis, fuel supplier certification of the sulfur content of the fuel oil to be combusted. The fuel supplier certification shall include the name of the oil supplier, sulfur content, and a statement that the oil complies with the specifications under the definition for distillate oil in Regulation 401 KAR 60:043.

b) The fuel oil sulfur content and heating value shall be determined for the #2 fuel oil, as received, by fuel supplier certification.

5. Specific Record Keeping Requirements:

a) Pursuant to Regulation 401 KAR 59:005, Section 3 (4), the owner or operator of the indirect heat exchanger shall maintain a file of all measurements, including monthly #2 fuel oil usage. The owner or operator shall maintain a file of the fuel supplier certification; and all other information required by Regulation 401 KAR 59:005 recorded in a permanent form suitable for inspection. The file shall be retained for at least five (5) years following the date of such measurements, maintenance, reports, and records.

b) Records of the #2 fuel oil used shall be maintained.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

NA

8. State-Origin Requirements:

a) Operating Limitations: NA

b) Emission Limitations: NA

9. Alternate Operating Scenarios: NA

10. Compliance Schedule NA

11. Compliance Certification Requirements

See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit: 05 (05, 06, -) - Fossil Fuel Handling Operations and Plant Roadways

Description:
Construction commenced on or before: 1990

Equipment includes:	Maximum Operating Rate (Tons/hour)
Continuous barge unloader, two barge unloader bins, clamshell barge unloader, and fossil fuel stacker reclaimer	5500
One active pile, one inactive pile, emergency stackout conveyor S, two inactive reclaim hoppers	3000
Plant Roadways	NA

Applicable Regulations:
Regulation 401 KAR 63:010, Fugitive emissions, and
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality.

Applicable Requirements

a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

1. application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;

2. operation of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling;

3. the maintenance of paved roadways in a clean condition;

4. the prompt removal of earth or other material from a paved street which earth or other material has been transported thereto by trucking or other earth moving equipment or erosion by water.

b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

c) No one shall allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway, pursuant to Regulation 401 KAR 63:010, Section 4.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

1. Operating Limitations:

None

2. Emission Limitations:

None

3. Testing Requirements:

None

4. Specific Monitoring Requirements:

See Section F.

5. Specific Record Keeping Requirements:

a) Records of the fossil fuels received and processed shall be maintained for emissions inventory purposes.

b) Annual records estimating the tonnage hauled for plant roadways shall be maintained for emissions inventory purposes.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The surfactants, enclosures, and a rotoclone for the fossil fuel receiving operations and the dust water suppressant system for the stockpile operations shall be used as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Plant roadways shall be controlled with water as necessary to comply with Regulation 401 KAR 63:010.

c) Records regarding the maintenance and use of the surfactants, enclosures, and a rotoclone for the fossil fuel receiving operations and the dust water suppressant system for the stockpile operations shall be maintained.

d) See Section E for further requirements.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

8. State-Origin Requirements:

a) Operating Limitations:
NA
b) Emission Limitations:
NA

9. Alternate Operating Scenarios:
NA

10. Compliance Schedule
NA

11. Compliance Certification Requirements
See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit: 07 (07, 08, 09) - Fossil Fuel Handling Operations

Description:
Construction commenced on or before: 1990

Equipment includes:	Maximum Operating Rate (Tons/hour)
Two crushers, fossil fuel crusher bin, and conveyors E, R1, F1, and F2	3600, each crusher
Conveyor system, conveyor belts A, B, C, D, G1, G2, 1, and 2, and fuel blender	5500
Six fossil fuel silos for Unit 1	Static capacity: 574 Tons per silo

Applicable Regulations:
Regulation 401 KAR 60:250, Standards of performance for coal preparation plants, which adopts by reference 40 CFR 60 Subpart Y for units commenced after October 24, 1974
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

1. Operating Limitations:
None

2. Emission Limitations:

a) Pursuant to Regulation 401 KAR 60:250, 40 CFR 60.252, the owner or operator subject to the provisions of this regulation shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

3. Testing Requirements:

a) Pursuant to Regulation 401 KAR 60:250, 40 CFR 60.254, EPA Reference Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity at least annually, or more frequently if requested by the Division.

4. Specific Monitoring Requirements:

The permittee shall perform a qualitative visual observation of the opacity of emissions from each stack on a weekly basis and maintain a log of the observations. If visible emissions from any stack are perceived or believed to exceed the applicable standard, the permittee shall determine the opacity of emissions by Reference Method 9 and instigate an inspection of the control equipment making any necessary repairs.

5. Specific Record Keeping Requirements:
a) Records of the fossil fuels processed shall be maintained for emissions inventory purposes.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The enclosures, surfactants, and rotoclone(s) for crushing and associated conveying operations, the partial enclosures for conveyor system with belts A, B, C, D, G1, G2, 1, 2, and fuel blender, and baghouse for the six fossil fuel silos shall be used/operated as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and use/operation of the control equipment listed in 7(a) shall be maintained.

c) See Section E for further requirements.

8. State-Origin Requirements:

a) Operating Limitations:
NA
b) Emission Limitations:
NA

9. Alternate Operating Scenarios:
NA

10. Compliance Schedule:
NA

11. Compliance Certification Requirements:
See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 10 (10 and 11) - Lime/Limestone Handling and Processing

Description:

Equipment includes: Receiving Operations: clamshell unloader, clamshell barge unloader bin;
Stockpile/Stackout Operations: active pile, inactive pile
Construction commenced on or before: 1990
Maximum Operating Rate (Receiving): 1650 Tons/hour
Maximum Operating Rate (Stockpile/Stackout): 1500 Tons/hr

Applicable Regulations:

Regulation 401 KAR 63:010, Fugitive emissions
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

Applicable Requirements:

a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne. Such reasonable precautions shall include, when applicable, but not be limited to the following:

1. application and maintenance of asphalt, application of water, or suitable chemicals on roads, material stockpiles, and other surfaces which can create airborne dusts;

2. operation of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling.

b) Pursuant to Regulation 401 KAR 63:010, Section 3, discharge of visible fugitive dust emissions beyond the property line is prohibited.

1. Operating Limitations:
None

2. Emission Limitations:
None

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

3. Testing Requirements:
None

4. Specific Monitoring Requirements:

See Section F.

5. Specific Record Keeping Requirements:

a) Records of the lime and/or limestone received and processed shall be maintained for emissions inventory purposes.

6. Specific Reporting Requirements:

See Section F.

7. Specific Control Equipment Operating Conditions:

a) The wet spray low water surfactant and enclosures shall be used as necessary to maintain compliance with applicable requirements, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance and use of the wet spray low water surfactant and enclosures shall be maintained.

c) See Section E for further requirements.

8. State-Origin Requirements:

a) Operating Limitations:
NA
b) Emission Limitations:
NA

9. Alternate Operating Scenarios:
NA

10. Compliance Schedule
NA

11. Compliance Certification Requirements
See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Units: 12 (12, 13) - Lime/Limestone Handling and Processing

Description:
Equipment Includes: underground crushing operation (one crusher);
and milling operations (two ball mills)
Construction commenced on or before: 1990
Operating Rate: 260 Tons/hour, each

Applicable Regulations:

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310), applies to each of the emissions units listed above, commenced after August 31, 1983
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

1. Operating Limitations:
None

2. Emission Standards:

a) Pursuant to Regulation 401 KAR 59:310, Section 2 (1), a substitution for 40 CFR 60.672(e), no owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other emissions unit any visible fugitive emissions.
Note that the crusher building is located underground with no direct vent to the atmosphere; therefore as long as this is the case it is assumed to be in compliance.

3. Testing Requirements:

In determining compliance with Regulation 401 KAR 59:310, Section 2(1) substitution for 40 CFR 60.672(e) for fugitive emissions from buildings, the owner(s) or operator(s) shall determine fugitive emissions while all emissions units are operating in accordance with EPA Reference Method 22, annually.

4. Specific Monitoring Requirements:

The permittee shall inspect the control equipment weekly and make repairs as necessary to assure compliance.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

5. Specific Record Keeping Requirements:

a) Records of the lime and/or limestone processed shall be maintained for emissions inventory purposes.

6. Specific Reporting Requirements:

a) Pursuant to Regulation 401 KAR 59:310, and 40 CFR 60.676, the owner(s) or operator(s) of any emissions unit shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672 and Regulation 401 KAR 59:310, including reports of observations using Method 22 to demonstrate compliance.

b) See Section F.

7. Specific Control Equipment Operating Conditions:

a) The enclosure shall be used as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the enclosure shall be maintained.

c) See Section E for further requirements.

8. State-Origin Requirements:

a) Operating Limitations:
NA
b) Emission Limitations:
NA

9. Alternate Operating Scenarios:
NA

10. Compliance Schedule
NA

11. Compliance Certification Requirements
See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit: 14 (14) - Lime/Limestone Handling and Processing

Description:
Equipment Includes: conveyors and transfer points (conveyor system, belts K, L, M, N, transfer bin, and inactive reclaim hopper)
Construction commenced on or before: 1990
Maximum Operating Rate: 1500 Tons/hour, each

Applicable Regulations:

Regulation 401 KAR 59:310, New nonmetallic mineral processing plants (40 CFR 60, Subpart OOO as modified by Section 2 of Regulation 401 KAR 59:310), applies to each of the emissions units listed above, commenced after August 31, 1983
Regulation 401 KAR 51:017, Prevention of significant deterioration of air quality

1. **Operating Limitations:**
None

2. **Emission Standards:**
a) Pursuant to Regulation 401 KAR 59:310, adopting by reference 40 CFR 60.672 (b), the owner(s) or operator(s) shall not cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other emissions unit any fugitive emissions which exhibit greater than ten (10) percent opacity.

b) Pursuant to Regulation 401 KAR 59:310, Section 2 (1), a substitution for 40 CFR 60.672(e), no owner or operator shall cause to be discharged into the atmosphere from any building/enclosure enclosing any transfer point on a conveyor belt or any other emissions unit any visible fugitive emissions.

3. **Testing Requirements:**

a) EPA Reference Method 9 and the procedures in 40 CFR 60.11 and 40 CFR 60.675 shall be used for determining opacity, annually.

b) In determining compliance with Regulation 401 KAR 59:310, Section 2(1) substitution for 40 CFR 60.672(e) for fugitive emissions from buildings/enclosures, the owner(s) or operator(s) shall determine fugitive emissions while all emissions units are operating in accordance with EPA Reference Method 22, annually.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

4. Specific Monitoring Requirements:

The permittee shall inspect the control equipment weekly and make repairs as necessary to assure compliance.

5. Specific Record Keeping Requirements:

a) Records of the lime and/or limestone processed shall be maintained for emissions inventory purposes.

6. Specific Reporting Requirements:

a) Pursuant to Regulation 401 KAR 59:310, and 40 CFR 60.676, the owner(s) or operator(s) of any emissions unit shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards of 40 CFR 60.672 and Regulation 401 KAR 59:310, including reports of opacity observations made using Method 9 to demonstrate compliance, and reports of observations using Method 22 to demonstrate compliance.

b) See Section F.

7. Specific Control Equipment Operating Conditions:

a) The partial enclosures shall be used as necessary to maintain compliance with permitted emission limitations, in accordance with manufacturer's specifications and/or standard operating practices.

b) Records regarding the maintenance of the partial enclosures shall be maintained.

c) See Section E for further requirements.

8. State-Origin Requirements:

a) Operating Limitations:
NA
b) Emission Limitations:
NA

9. Alternate Operating Scenarios:
NA

10. Compliance Schedule
NA

11. Compliance Certification Requirements
See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emissions Unit: 18 (18) - Emergency diesel generator

Description:

Maximum Output: 150 kW
Rated capacity: 16.1 gallons/hour diesel fuel
Constructed on or before date: 1995

Applicable Regulations: The emissions unit is not subject to any applicable regulations.

1. Operating Limitations:
None

2. Emission Limitations:
None

3. Testing Requirements:
None

4. Specific Monitoring Requirements:
See Section F.

5. Specific Record Keeping Requirements:
a) Records of the fuel usage rate shall be maintained for emissions inventory purposes.

6. Specific Reporting Requirements:
See Section F.

7. Specific Control Equipment Operating Conditions:
NA

8. State-Origin Requirements:
a) Operating Limitations:
NA
b) Emission Limitations:
NA

9. Alternate Operating Scenarios:
NA

10. Compliance Schedule
NA

11. Compliance Certification Requirements
See Section F.

SECTION B - EMISSION POINTS, EMISSIONS UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emissions Unit: 20 (17) - Cooling Tower (with Four pumps, circulating water and pump)

Description:
Constructed on or before date: September, 1990
Water circulation rate: 173,250 gallons per minute

Applicable Regulations:
Regulation 401 KAR 63:010, Fugitive emissions

Applicable Requirements:
a) Pursuant to Regulation 401 KAR 63:010, Section 3, reasonable precautions shall be taken to prevent particulate matter from becoming airborne.

1. **Operating Limitations:**
   None

2. **Emission Limitations:**
   None

3. **Testing Requirements:**
   None

4. **Specific Monitoring Requirements:**
   See Section F.

5. **Specific Record Keeping Requirements:**
   a) Records of the water circulation rate shall be maintained for emissions inventory purposes.

6. **Specific Reporting Requirements:**
   See Section F.

7. **Specific Control Equipment Operating Conditions:**
   See Section E.

8. **State-Origin Requirements:**
   a) Operating Limitations: NA
   b) Emission Limitations: NA

9. **Alternate Operating Scenarios:** NA

10. **Compliance Schedule** NA

11. **Compliance Certification Requirements**
    See Section F.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to Regulation 401 KAR 50:035, Section 5(4).

1. Two station #2 fuel oil tanks, each 100,000 gallons, and auxiliary boiler day tank storing #2 fuel oil with a size of 16,000 gallons, to which Regulation 401 KAR 59:485 which references 40 CFR 60 Subpart Kb which applies, specifically 40 CFR 60.116b(a) and (b), general recordkeeping requirements.

2. Metal degreaser using a maximum throughput of 832 gallons/year solvent.

3. 3,000 gallon unleaded gasoline storage tank.

4. 3,000 gallon diesel storage tank.

5. 1,100 gallon used oil storage tank.

6. 1,100 gallon #1 fuel oil tank.

7. Flyash collection system to which Regulation 401 KAR 59:010 applies.

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. Particulate, sulfur dioxide, nitrogen oxides, and visible (opacity) emissions, as measured by methods referenced in Regulation 401 KAR 50:015, Section 1, shall not exceed the respective limitations specified herein. Compliance with visible emission limitations for the indirect heat exchanger (emissions unit 1) shall be determined using continuous opacity monitoring data.

2. Compliance with annual emissions and operating limitations imposed pursuant to Regulation 401 KAR 50:035, Section 7(1)(a), and contained in this permit, shall be based on emissions and operating rates for any twelve (12) consecutive months.

SECTION E - CONTROL EQUIPMENT CONDITIONS

1. Pursuant to Regulation 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any emissions unit including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS

1. When continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
   a) Date, place as defined in this permit, and time of sampling or measurements;
   b) Analyses performance dates;
   c) Company or entity that performed analyses;
   d) Analytical techniques or methods used;
   e) Analyses results; and
   f) Operating conditions during time of sampling or measurement.

2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality.

3. The permittee shall allow the Division or authorized representatives to perform the following:
   a) Enter upon the premises where a source is located or emissions-related activity is conducted, or where records are kept;
   b) Have access to and copy, at reasonable times, any records required by the permit:
      i) During normal office hours, and
      ii) During periods of emergency when prompt access to records is essential to proper assessment by the Division;
   c) Inspect, at reasonable times, any facilities, equipment (including monitoring and pollution control equipment), practices, or operations required by the permit. Reasonable times shall include, but are not limited to the following:
      i) During all hours of operation at the source,
      ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
      iii) During an emergency; and
   d) Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements. Reasonable times shall include, but are not limited to the following:
      i) During all hours of operation at the source,
      ii) For all sources operated intermittently, during all hours of operation at the source and the hours between 8:00 a.m. and 4:30 p.m., Monday through Friday, excluding holidays, and
      iii) During an emergency.

4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.

SECTION F - MONITORING, RECORD KEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

5. Reports of any monitoring required by this permit, other than continuous emission or opacity monitors, shall be submitted to the Division's Florence Regional Office no later than the six-month anniversary date of this permit and every six months thereafter during the life of this permit, unless otherwise stated in this permit. Data from the continuous emission and opacity monitors shall be reported to the Director in accordance with the requirements of Regulation 401 KAR 59:005, General Provisions, Section 3. All reports shall be certified by a responsible official pursuant to Section 6 (1) of Regulation 401 KAR 50:035, Permits. All deviations from permit requirements shall be clearly identified in the reports.

6. In accordance with Regulation 401 KAR 50:055, Section 1, the owner or operator shall notify the Division for Air Quality's Florence Regional Office by telephone or fax as promptly as possible of any deviation from permit requirements, including those due to malfunctions, unplanned shutdowns, ensuing startups, or upset conditions, and report excess emissions. For this source, promptly will be defined as three (3) hours from the occurrence of the deviation. Pursuant to Regulation 401 KAR 50:035, Section 7(1)(e), the permittee shall submit a written notice describing the probable cause of the deviations and corrective actions or preventive measures taken within two (2) working days from the occurrence of the deviation(s) when technology-based emission limitation(s) are exceeded.

7. The permittee shall certify compliance with the terms and conditions contained in this permit, annually on the permit issuance anniversary date to the Division for Air Quality's Florence Regional Office and the U.S. EPA in accordance with the following requirements:
   a) Identification of each term or condition of the permit that is the basis of the certification;
   b) The compliance status regarding each term or condition of the permit;
   c) Whether compliance was continuous or intermittent;
   d) The method used for determining the compliance status for the source, currently and over the reporting period, pursuant to Regulation 401 KAR 50:035, Section 7(1) (c), (d), and (e);
   e) Other facts the Division may require to determine the compliance status of the source; and
   f) The certification shall be postmarked by the thirtieth (30th) day following the applicable permit issuance anniversary date.

8. In accordance with Regulation 401 KAR 50:035, Section 23, the permittee shall report all information necessary to determine its subject emissions.

9. Pursuant to Section VII.3 of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section 1(1), results of performance tests shall be submitted to the Division by the source or its representative within forty-five (45) days after the completion of the fieldwork.

SECTION G - GENERAL CONDITIONS

a) General Compliance Requirements

1. The permittee shall comply with all conditions of this permit. Noncompliance shall be (a) violation(s) of State Regulation 401 KAR 50:035, Permits, Section 7(3)(d) and for federally enforceable permits is also a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) and are grounds for enforcement action including but not limited to the termination, revocation and reissuance, or revision of this permit.

2. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition.

3. This permit may be revised, revoked, reopened and reissued, or terminated for cause. The permit will be reopened for cause and revised accordingly under the following circumstances:
   i) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to Regulation 401 KAR 50:035, Section 12(2)(c);
   ii) If any additional applicable requirements of the Acid Rain Program become applicable to the source;
   iii) The Division or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or
   iv) The Division or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

   Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

4. The permittee shall furnish to the Division, in writing, information that the Division may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit.

5. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit.

6. Pursuant to Regulation 401 KAR 50:035, Section 7(3)(e), the permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance.

SECTION G - GENERAL CONDITIONS (CONTINUED)

7. Except as identified as state-origin requirements in this permit, all terms and conditions contained herein shall be enforceable by the United States Environmental Protection Agency and citizens of the United States.

8. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within ninety (90) days after the date of notice as specified in Regulation 401 KAR 50:038, Section 3(6).

9. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance.

10. This permit shall not convey property rights or exclusive privileges.

11. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Kentucky Cabinet for Natural Resources and Environmental Protection or any other federal, state, or local agency.

12. Nothing in this permit shall alter or affect the authority of the U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry.

13. Nothing in this permit shall alter or affect the authority of the U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders.

14. Permit shield: Except as provided in State Regulation 401 KAR 50:035, Permits, compliance by the emissions units listed herein with the conditions of this permit shall be deemed to be compliance with all applicable requirements identified in this permit as of the date of issuance of this permit.

15. The permittee may conduct test burns of materials other than those listed in the permit without a construction permit or a reopening of this permit provided that:
    a) Notification is provided to the Division at least thirty (30) days prior to initiation of the test burning of the material;
    b) The source complies with all applicable regulations and emission limitations;
    c) The permittee agrees to perform such additional testing as may be required by the Division.

16. The permanent burning of any material (addressed in the above condition) shall be allowed upon completion of testing provided that:
    a) The Division determines that a permit is not required. Such determination shall be made within 60 days of the application receipt along with the test results;
    b) The permittee keeps records of the date and time of the burn;
    c) The permittee keeps records of the analysis and feed rate of the material;
    d) Burning any of those materials shall not be subject to any new applicable regulation and the source shall comply with all applicable regulation and emission limitations.

17. Fugitive emissions shall be controlled in accordance with Regulation 401 KAR 63:010.

SECTION G - GENERAL CONDITIONS (CONTINUED)

18. Emission limitations listed in this permit shall apply at all times except during periods of startup, shutdown, or malfunctions in accordance with Regulation 401 KAR 50:055.

19. Pursuant to Section VII 2.2.(1) of the policy manual of the Division for Air Quality as referenced by Regulation 401 KAR 50:016, Section1(1), at least one month prior to the date of the required performance test, the permittee shall complete and return a Compliance Test Protocol (Form DEP 6027) to the Division's Frankfort Central Office. Pursuant to Regulation 401 KAR 50:045, Section 5, the Division shall be notified of the actual test date at least ten (10) days prior to the test.

b) Permit Expiration and Reapplication Requirements

1. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete application submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division.

c) Permit Revisions

1. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan or in applicable requirements and meet the relevant requirements of Regulation 401 KAR 50:035, Section 15.

2. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority thirty (30) days in advance of the transfer.

d) Acid Rain Program Requirements

1. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.

2. The permittee shall comply with all requirements and conditions of the Title IV, Acid Rain Permit(s) issued for this source.

SECTION G - GENERAL CONDITIONS (CONTINUED)

e) Emergency Provisions

1. An emergency shall constitute an affirmative defense to an action brought for noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or other relevant evidence that:
   i) An emergency occurred and the permittee can identify the cause of the emergency;
   ii) The permitted facility was at the time being properly operated;
   iii) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and,
   iv) The permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division within two working days after the time when emission limitations were exceeded due to the emergency. The notice shall meet the requirements of Regulation 401 KAR 50:035, Permits, Section 7(1)(e)2, and include a description of the emergency, steps taken to mitigate emissions, and the corrective actions taken. This requirement does not relieve the source of any other local, state or federal notification requirements.

2. Emergency conditions listed in General Condition (e)1., above, are in addition to any emergency or upset provision(s) contained in an applicable requirement.

3. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof.

f) Risk Management Provisions under CAA 112(r)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall:

   a. Submit a Risk Management Plan to the U.S. EPA, Region IV with a copy to this Division and comply with the Risk Management Program by June 21, 1999 or a later date specified by the U.S. EPA.

   b. Submit additional relevant information if requested by the Division or the U.S. EPA.

SECTION G - GENERAL CONDITIONS (CONTINUED)

g) Ozone Depleting Substances

1. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
   a. Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
   b. Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards of recycling and recovery equipments contained in 40 CFR 82.158.
   c. Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
   d. Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined in 40 CFR 82.152) shall comply with the record keeping requirements pursuant to 40 CFR 82.166.
   e. Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
   f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

2. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

SECTION H - ALTERNATE OPERATING SCENARIOS

None

SECTION I - COMPLIANCE SCHEDULE

None